EDITORIAL

Arguments for Coordination of Primary and Secondary Prevention for Breast Cancer?

In the present issue of the APJCP, a total of six papers concern breast cancer, Choi et (2005) and Igisinov et al (2005) reporting on the continuing increase in mortality, Badar et al (2005) on variables associated with recurrence, Ravichandran et al (2005) on survival, and Miller (2005) and Sevil et al (2005) focusing on different aspects of screening. As we have argued earlier in the APJCP (Moore et al., 2003) there is no doubt that mammary gland neoplasia is of prime importance in the Asian-Pacific region and research efforts urgently need to be focused on what measures should be promoted for cancer control programs.

Financial constraints mean that mammography for national screening programs is not a viable option at present for most countries in Asia and, indeed, even in the developed countries results with this modality have been less than encouraging (Miller, 2005). This means that attention must be focused on clinical breast examination (CBE) and breast self-examination (BSE). While CBE appears more promising (Albert and Schulz, 2003), most studies in the western world have unfortunately indicated that BSE does not positively impact on survival. For example, in a USSR/WHO randomized study in Leningrad, comparisons of patients with regard to the size of primary tumors and the incidence of metastatic lesions in the regional lymph nodes showed no differences (Semiglazov et al 1992) and similar findings were reported in Finland (Auvinen et al., 1996) and Canada (Miller et al., 1993).

In Shanghai, a randomised clinical trial also indicated that intensive instruction in BSE did not reduce mortality from breast cancer and the conclusion was that women who choose to practice BSE should be informed that its efficacy is unproven and that it may increase their chances of having a benign breast biopsy (Thomas et al., 2002). Case control type studies in Japan, on the other hand, have all pointed to improvement in survival due to earlier detection of smaller lesions (Ota et al., 1989; Kuroishi et al., 1992; Kurebayashi et al., 1994; Koibuchi et al., 1998). How should the available data then be interpreted? A clue may be given by the statement of Newcomb et al (1991) - 'while carefully performed BSE may avoid the development of some advanced-stage breast cancers, BSE as practiced by most Seattle-area women is of little or no benefit'. In a Canadian study, prospectively collected data suggested that the performance of specific BSE components may reduce the risk of death from breast cancer (Harvey et al., 1997). Thus we need to perhaps concentrate more attention on the methodology and effective training.

Spending more time on BSE is associated with a higher rate of completeness and those with a stronger motivation and lesser thought barriers are more confident in their practice (Ng et al., 2000). Use of an educational videotape increased the frequency of BSE among premenopausal women in Australia (Janda et al., 2002) and mammacare instruction resulted in more long-term improved lump detection and examination technique use than did traditional instruction or physician encouragement (Fletcher et al., 1990). Barriers like a low place of preventive health concerns in the personal agenda of females, lack of effective referral from primary care providers, fear of cancer diagnosis, apprehensions of irradiation and pain involved in mammography, a fatalist general attitude towards health and illness, and mistrust of current cancer therapy all need to be taken into account (Remennick, 2003). Acquired information about barriers to screening may help in the design of effective screening programs for Arabic women (Bener et al., 2001). In young Asian women living in the United States, factor analysis of cultural barriers to screening revealed four factors: communication with mother, openness around sexuality, prevention orientation, and utilization of Western medicine (Tang et al., 1999). Nursing interventions can significantly increase BSE frequency and accuracy, perceived competence and benefit, and decrease barriers (Lu, 2001).

From the results of a meta-analysis, Ku (2001) suggested that the healthcare research community needs to state BSE research findings in terms of recommendations for further studies. A number of variables which are not always given sufficient consideration in interpretation of screening results are listed in Table 1. One is the impact of breast density (Nagao et al., 2003; Chen et al., 2004) and another is the histological type of tumor (Newcomer et al., 2002), which may vary with the racial group (Klonoff-Cohen et al., 1998) and oral contraceptive use (Newcomer et al., 2003). The hormone receptor status may also need to be taken into consideration (Li et al., 2003). As emphasized by McCormack et al (2004) in a study of breast cancer risk in different South Asian immigrant groups in the UK, body size is a major factor. Risk is linked positively with BMI in Japan (Hu et al., 1997), as well as negatively with physical exercise (Hirose et al., 2003), as in the US (John et al., 2003; Patel et al., 2003). Frequent miso soup and isoflavone consumption is associated with a reduced risk of breast cancer (Yamamoto et al., 2003) and it appears that soy consumption throughout life may have some effect on breast

Table 1. Factors for Evaluation of Breast Self-Examination

Awareness, attitude and aptitude
Optimal methodology and timing
Breast size and density
Lifestyle - physical exercise and dietary background
Tumour pathology and estrogen receptor status

Table 2. Targets for Training and Education

Physical exercise, BMI and obesity

density (Maskarinec et al., 2004). Clearly other dietary factors could also be playing a role. These all need to be taken into account, together with reproductive factors, in future assessment of the efficacy of BRE for screening. This could optimally be achieved by target populations filling out a questionnaire to provide the necessary lifestyle data, and the results then coordinated with clinical findings for those individuals who do develop breast cancers.

The envisaged approach would clearly need coordination with provision of essential information for education and training with regard to optimal methodology (see Table 2). What would then result is a combination of primary and secondary prevention in practice. The scale of the problem and the likelihood that it will rapidly increase in Asia in the future, means that all avenues need to be explored.

References

- Albert US, Schulz KD (2003). Clinical breast examination: what can be recommended for its use to detect breast cancer in countries with limited resources? *Breast J*, **9 Suppl 2**, S90-3.
- Auvinen A, Elovainio L, Hakama M (1996). Breast self-examination and survival from breast cancer: a prospective follow-up study. *Breast Cancer Res Treat*, **38**, 161-8.
- Badar F, Moid I, Waheed F, et al (2005). Variables associated with recurrence in breast cancer patients -the Shaukat Khanum Memorial experience. Asian Pacific J Cancer Prev, 6, 54-7.
- Bener A, Alwash R, Miller CJ, Denic S, Dunn EV (2001). Knowledge, attitudes, and practices related to breast cancer screening: a survey of Arabic women. *J Cancer Educ*, **16**, 215-20.
- Chen Z, Wu AH, Gauderman WJ, et al (2004). Does mammographic density reflect ethnic differences in breast cancer incidence rates? *Am J Epidemiol*, **159**, 140-7.
- Choi Y, Kim YJ, Shin H-R, Noh DY, Yoo K-Y (2005). Long-term prediction of female breast cancer mortality in Korea. *Asian Pacific J Cancer Prev*, **6**, 16-.
- Fletcher SW, O'Malley MS, Earp JL, et al (1990). How best to teach women breast self-examination. A randomized controlled trial. *Ann Intern Med*, **112**, 772-9.

- Harvey BJ, Miller AB, Baines CJ, Corey PN (1997). Effect of breast self-examination techniques on the risk of death from breast cancer. CMAJ, 157, 1205-12.
- Hirose K, Hamajima N, Takezaki T, Miura S, Tajima K (2003).
 Physical exercise reduces risk of breast cancer in Japanese women. *Cancer Sci.*, 94, 193-9.
- Hu YH, Nagata C, Shimizu H, Kaneda N, Kashiki Y (1997). Association of body mass index, physical activity, and reproductive histories with breast cancer: a case-control study in Gifu, Japan. Breast Cancer Res Treat, 43, 65-72.
- Igisinov N, Kokteubaeva N, Kudaibergenova I (2005). Epidemiology of breast cancer in females of reproductive age in Kyrgyzstan. *Asian Pacific J Cancer Prev*, **6**, 37-40.
- Janda M, Stanek C, Newman B, Obermair A, Trimmel M (2002).
 Impact of videotaped information on frequency and confidence of breast self-examination. *Breast Cancer Res Treat*, 73, 37-43
- John EM, Horn-Ross PL, Koo J (2003). Lifetime physical activity and breast cancer risk in a multiethnic population: the San Francisco Bay area breast cancer study. Cancer Epidemiol Biomarkers Prev. 12, 1143-52.
- Klonoff-Cohen HS, Schaffroth LB, Edelstein SL, Molgaard C, Saltzstein SL. (1998). Breast cancer histology in Caucasians, African Americans, Hispanics, Asians, and Pacific Islanders. Ethn Health, 3, 189-98.
- Koibuchi Y, Iino Y, Takei H, et al (1998). The effect of mass screening by physical examination combined with regular breast self-examination on clinical stage and course of Japanese women with breast cancer. *Oncol Rep*, **5**, 151-5.
- Ku YL (2001). The value of breast self-examination: meta-analysis of the research literature. *Oncol Nurs Forum*, **28**, 815-22.
- Kurebayashi J, Shimozuma K, Sonoo H (1994). The practice of breast self-examination results in the earlier detection and better clinical course of Japanese women with breast cancer. *Surg Today*, **24**, 337-41.
- Kuroishi T, Tominaga S, Ota J, et al (1992). The effect of breast self-examination on early detection and survival. *Jpn J Cancer Res*, **83**, 344-50.
- Li CI, Daling JR, Malone KE (2003). Incidence of invasive breast cancer by hormone receptor status from 1992 to 1998. J Clin Oncol, 21(1):28-34.
- Lu ZJ (2001). Effectiveness of breast self-examination nursing interventions for Taiwanese community target groups. J Adv Nurs, 34, 163-70.
- Maskarinec G, Takata Y, Franke AA, Williams AE, Murphy SP (2004). A 2-year soy intervention in premenopausal women does not change mammographic densities. *J Nutr*, **134**, 3089-94.
- McCormack VA, Mangtani P, Bhakta D, McMichael AJ, dos Santos Silva I (2004). Heterogeneity of breast cancer risk within the South Asian female population in England: a population-based case-control study of first-generation migrants. *Br J Cancer*, **90**, 160-6.
- Miller AB (2005). Screening for breast cancer is there an alternative to mammography? *Asian Pacific J Cancer Prev*, **6**, 83-6.
- Miller AB, Baines CJ, To T, Wall C. (1993). Canadian National Breast Screening Study: 1. Breast cancer detection and death rates among women aged 40 to 49 years. *CMAJ*, **147**, 1459-76.
- Moore MA, Tajima K, Anh PTH, et al (2003). Grand challenges in global health and the Practical Prevention Program? Asian focus on cancer prevention in females of the developing world. *Asian*

- Pacific J Cancer Prev, 4, 153-165.
- Nagao Y, Kawaguchi Y, Sugiyama Y, Saji S, Kashiki Y (2003). Relationship between mammographic density and the risk of breast cancer in Japanese women: a case-control study. *Breast Cancer*, 10, 228-33.
- Newcomb PA, Weiss NS, Storer BE, et al (1991). Breast self-examination in relation to the occurrence of advanced breast cancer. *J Natl Cancer Inst*, **83**, 260-5.
- Newcomer LM, Newcomb PA, Trentham-Dietz A, Longnecker MP, Greenberg ER (2003). Oral contraceptive use and risk of breast cancer by histologic type. *Int J Cancer*, **106**, 961-4.
- Newcomer LM, Newcomb PA, Trentham-Dietz A, et al (2002). Detection method and breast carcinoma histology. *Cancer*, 95, 470-7.
- Ng KK, Fung SY, Chow LW (2000). Practice of breast self-examination among high risk Chinese women in Hong Kong. *Chin Med J*, **113**, 1100-3.
- Ota J, Horino T, Taguchi T, et al (1989). Mass screening for breast cancer: comparison of the clinical stages and prognosis of breast cancer detected by mass screening and in out-patient clinics. *Jpn J Cancer Res*, **80**, 1028-34.
- Patel AV, Press MF, Meeske K, Calle EE, Bernstein L (2003). Lifetime recreational exercise activity and risk of breast carcinoma in situ. *Cancer*, 98, 2161-9.
- Ravichandran K, Al Hamdan N, Al Dyab AR (2005). Population based survival of female breast cancer cases in Riyadh region, Saudi Arabia. *Asian Pacific J Cancer Prev.* 6, 73-77.
- Remennick L (2003). "I have no time for potential troubles": Russian immigrant women and breast cancer screening in Israel. *J Immigr Health*, **5**, 153-63.
- Semiglazov VF, Moiseyenko VM, Bavli JL, et al (1992). The role of breast self-examination in early breast cancer detection (results of the 5-years USSR/WHO randomized study in Leningrad). *Eur J Epidemiol*, **8**, 498-502.
- Sevil U, Atan SU, Kiris H, et al (2005). Peer education project on breast self-examination in Izmir, Turkey. Asian Pacific J Cancer Prev, 6, 29-32.
- Tang TS, Solomon LJ, Yeh CJ, Worden JK (1999). The role of cultural variables in breast self-examination and cervical cancer screening behavior in young Asian women living in the United States. *J Behav Med*, **22**, 419-36.
- Thomas DB, Gao DL, Ray RM, et al (2002). Randomized trial of breast self-examination in Shanghai: final results. *J Natl Cancer Inst*, **94**, 1445-57.
- Yamamoto S, Sobue T, Kobayashi M, Sasaki S, Tsugane S; Japan Public Health Center-Based Prospective Study on Cancer Cardiovascular Diseases Group (2003). Soy, isoflavones, and breast cancer risk in Japan. *J Natl Cancer Inst*, **95**, 906-13.

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EDITORIAL MESSAGE

Inclusion of Documents from the International Association of Cancer Registries in the APJCP

In the present issue of the journal, two documents from the International Association of Cancer Registries (IACR) are included, one entitled 'Guidelines on Confidentiality for Population-Based Cancer Registration' (IACR, 2005a) and the other 'International Rules for Multiple Primary Cancers' (IACR 2005b).

These are being jointly published in the APJCP and the European Journal of Cancer Prevention, the two official journals of the IACR, in the interest of making important articles available to the broader medical community, allowing inclusion in MedLine and citation in Reference lists. The copyright is retained by the IACR and the APJCP makes no demands in terms of any right to publish, distribute, and sell in any form, language or media, with or without referral to the Society. During my period as Chief Editor,

the APJCP will continue a policy of positive cooperation with the IACR and any other Organization devoted to furthering cancer prevention in making its pages available for such publication. Any queries in this regard, or concerning Meeting Announcements or Reports can be addressed to myself at apocp2000@yahoo.com or by post of fax to the Editorial Office (details on the inside cover).

I would like now to formally draw your attention to the fact that these two documents will also be published in the European Journal of Cancer Prevention.

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EDITORIAL MESSAGE

Statement of Intent of Malcolm A Moore, Chief Editor of the APJCP 2005/2006

For the two year period until the third General Assembly Conference to be held in Bangkok, Thailand, in November 2006, I am taking over from Kazuo Tajima as the Chief Editor, responsible for all aspects of publication of the APJCP. This will not entail major changes in policy or format, but in the interests of efficiency I would like to request that all those scientists interested in publishing in the journal now submit their papers as Word text files directly to apocp2000@yahoo.com, with one hard copy containing high quality illustrations sent to the Editorial Office, c/o the National Cancer Institute, Thailand, so that they can be scanned. This will avoid the variation in quality that we have experienced in the past with electronic files for figures.

In the past, I have been acting as Managing Editor basically as a volunteer and this will continue to be my status for the next two years, assuming that it remains feasible. However, I am not in a position to make an open-ended commitment and we need to plan in good time for my stepping down in favour of a younger and more energetic individual at the end of 2006. If there are any scientists who might be interested in taking over as Chief Editor, please let

me or Kazuo Tajima know and we can prepare a list of candidates for a decision to be made in the next General Assembly.

For myself, I have three main aims for the APJCP in the next two years:

- 1. Acceptance for the Science Citation Index and establishing an impact factor to be improved upon
- 2. Organize direct download of pdf files for all published papers through Medline
 - 3. Increase the membership and readership

The degree to which I will be successful will be totally dependent on the support that is received. It is up to yourselves. It is not 'my' journal as people have mistakenly said to me in the past. It is 'your' journal, to do with as 'you' wish.

Malcolm A Moore

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